

GenCore version 5.1.4.p5_4578
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OM protein - protein search, using sw model

Run on: May 19, 2003, 16:43:18 ; Search time 29.0436 Seconds
(without alignments)
1237.942 Million cell updates/sec

Title: US-09-625-573-2
Perfect score: 1970
Sequence: 1 MLSTSRFRINTNESGEEV.....GKKSIGRAPASLQDKEGA 374

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR-73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1970	100.0	374	2 I38450	chemokine (C-C) re
2	1651.5	83.8	360	2 JC2443	chemokine (C-C) re
3	1224	62.1	352	2 A43113	chemokine (C-C) re
4	967.5	49.1	355	2 A45177	chemokine (C-C) re
5	960	48.7	359	2 I49341	MIP-1 alpha recept
6	902.5	45.8	355	2 I49339	macrophage inflam
7	890.5	45.2	355	2 G02436	chemokine (C-C) re
8	833	42.3	360	2 JC4587	chemokine (C-C) re
9	831.5	42.2	360	2 A57160	chemokine (C-C) re
10	794.5	40.3	383	2 S55594	G protein-coupled
11	731	37.1	356	2 I49340	MIP-1 alpha recept
12	723	36.7	355	2 JC5067	G protein-coupled
13	704.5	35.8	354	2 I58186	probable G protein-
14	698	35.4	355	2 JC4304	orphan G protein-c
15	644.5	32.7	344	2 JC5942	chemokine receptor
16	584	29.6	378	2 B55735	lymphocyte-specifi
17	575.5	29.2	378	2 A55735	G protein-coupled
18	570	28.9	378	2 A45680	G protein-coupled
19	554.5	28.1	369	2 JC5068	G protein-coupled
20	541.5	27.5	360	2 A53611	interleukin-8 rece
21	537	27.3	359	2 A48921	interleukin-8 rece
22	531	27.0	352	2 G00048	fusin (LESTRA) - c
23	530.5	26.9	353	2 S28787	neuropeptide Y/pep
24	529.5	26.9	355	2 JQ1231	interleukin-8 rece
25	528	26.8	352	2 A54747	neuropeptide Y/pep
26	526	26.7	358	2 A53752	interleukin-8 rece
27	526	26.7	367	2 JE0349	interferon-inducib
28	524.5	26.6	350	2 A39445	interleukin-8 rece
29	523	26.5	356	2 S42096	interleukin-8 rece

ALIGNMENTS

RESULT 1

I38450

Chemokine (C-C) receptor 2, splice form A - human

N:Alternate names: C-C CKR-2; monocyte chemoattractant protein 1 receptor; monocyte

C:Species: Homo sapiens (man)

C>Date: 16-Feb-1996 #sequence_revision 16-Feb-1996 #text_change 13-Aug-1999

C:Accession: I38450

R:Charo, I.F.; Myers, S.J.; Herman, A.; Franci, C.; Connolly, A.J.; Coughlin, S.R.

Proc. Natl. Acad. Sci. U.S.A. 91, 2752-2756, 1994

A:Title: Molecular cloning and functional expression of two monocyte chemoattractant

A:Reference number: A53477; MUID:94195821; PMID:8146186

A:Accession: I38450

A>Status: preliminary

A:Molecule type: mRNA

A:Residues: 1-374 <RES>

A:Cross-references: EMBL:U03882; NID:g472555; PIDN:AAAL9119.1; PID:g472556

C:Genetics:

A:Gene: GDB:CMKBR2

A:Cross-references: GDB:337364; OMIM:601267

A:Map position: 3p21-3p21

C:Superfamily: vertebrate rhodopsin

C:Keywords: alternative splicing; G protein-coupled receptor; glycoprotein; transmem

F:44-68/Domain: transmembrane #status predicted <TM1>

F:79-99/Domain: transmembrane #status predicted <TM2>

F:115-136/Domain: transmembrane #status predicted <TM3>

F:154-178/Domain: transmembrane #status predicted <TM4>

F:208-226/Domain: transmembrane #status predicted <TM5>

F:244-265/Domain: transmembrane #status predicted <TM6>

F:292-309/Domain: transmembrane #status predicted <TM7>

F:14/Binding site: carbohydrate (Asn) (covalent) #status predicted

F:32-277,113-190/Disulfide bonds: #status predicted

Query Match 100.0%; Score 1970; DB 2; Length 374;
Best Local Similarity 100.0%; Pred. No. 2.8e-167; Gaps 0;
Matches 374; Conservative 0; Mismatches 0; Indels 0

QY 1 MLSTSRFRINTNESGEEVTFDFDYDGAPCHRFQKVGQALLPPLYSLVFFGFYGN 60

DB 1 MLSTSRFRINTNESGEEVTFDFDYDGAPCHRFQKVGQALLPPLYSLVFFGFYGN 60

QY 61 MLVLLILINCKKLCCLDIYLLNLAIISDLLELITLPLWAHSAANEWFGNAMCKLFTGLY 120

DB 61 MLVLLILINCKKLCCLDIYLLNLAIISDLLELITLPLWAHSAANEWFGNAMCKLFTGLY 120

QY 121 HIGYFGGIFILLITIDRYLAIVHAFKARTVTEGVVTSVITWLVAFAVSVPGLIIFTK 180

DB 121 HIGYFGGIFILLITIDRYLAIVHAFKARTVTEGVVTSVITWLVAFAVSVPGLIIFTK 180

QY 181 CQKEDSVVCGPYFPFGWNNFHTIMRNILGLVLPILLIMVICYSGILKTLRCRNEKKRHR 240

DB 181 CQKEDSVVCGPYFPFGWNNFHTIMRNILGLVLPILLIMVICYSGILKTLRCRNEKKRHR 240

QY 241 AVRVIPTIMIVYFLWTPYNIIVILLNTFQEFGLSNCESTSQLDOATQVTEITLGMTHCCI 300
Db 241 AVRVIPTIMIVYFLWTPYNIIVILLNTFQEFGLSNCESTSQLDOATQVTEITLGMTHCCI 300
QY 301 NPIIYAVGKFRSLFHLALGCRITAPLQKPGVGGPGVPGKGNVKTTOGLLDGRGKGSKI 360
Db 301 NPIIYAVGKFRSLFHLALGCRITAPLQKPGVGGPGVPGKGNVKTTOGLLDGRGKGSKI 360
QY 361 GRAPEASLODKEGA 374
Db 361 GRAPEASLODKEGA 374
RESULT 2
JC2443
Chemokine (C-C) receptor 2, splice form B - human
N:Alternate names: C-C CRK-2; monocyte chemoattractant protein 1 receptor; monocyte chem
C:Species: Homo sapiens (man)
C:Date: 21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change 20-Jun-2000
A:Accession: JC2443; 138463
A:Title: Molecular cloning and functional expression of a human monocyte chemoattractant prot
A:Reference number: JC2443; MUID:94324942; PMID:8048929
A:Accession: JC2443
A:Molecule type: mRNA
A:Residues: 1-360 <YAM>
A:Cross-references: DDBJ:D29984; NID:g531246; PIDN:BAA06253.1; PID:g531247
R:Charo, I.F.; Myers, S.J.; Herman, A.; Franci, C.; Connolly, A.J.; Coughlin, S.R.
Proc. Natl. Acad. Sci. U.S.A. 91, 2752-2756, 1994
A:Title: Molecular cloning and functional expression of two monocyte chemoattractant pr
A:Reference number: A53477; MUID:94195821; PMID:8146186
A:Accession: 138463
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-360 <RES>
A:Cross-references: EMBL:U03905; NID:g472557; PIDN:AAA19120.1; PID:g472558
C:Genetics:
A:Gene: GDB:CMKBR2
A:Cross-references: GDB:337364; OMIM:601267
A:Map position: 3p21-3p21
C:Superfamily: vertebrate rhodopsin
C:Keywords: alternative splicing; G protein-coupled receptor; glycoprotein; transmembran
F:81-100/Domain: transmembrane #status predicted <TM2>
F:115-136/Domain: transmembrane #status predicted <TM3>
F:154-178/Domain: transmembrane #status predicted <TM4>
F:207-226/Domain: transmembrane #status predicted <TM5>
F:244-268/Domain: transmembrane #status predicted <TM6>
F:287-309/Domain: transmembrane #status predicted <TM7>
F:14/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:113-190/Disulfide bonds: #status predicted
Query Match 83.8%; Score 1651.5; DB 2; Length 360;
Best Local Similarity 95.5%; Pred. No. 5.3e-139;
Matches 319; Conservative 3; Mismatches 5; Indels 7; Gaps 3;
QY 1 MLSTSRFRIRNTNNGSGEVTTFFDYDYGAPCHKFDVKQIGAGLLPLSLVFIFFGVGN 60
Db 1 MLSTSRFRIRNTNNGSGEVTTFFDYDYGAPCHKFDVKQIGAGLLPLSLVFIFFGVGN 60
QY 61 MLVVLINCKKLKLTIDYLLNLALISDLFLITPLWAHSAANWVFGNAMCKLFTGLY 120
Db 61 MLVVLINCKKLKLTIDYLLNLALISDLFLITPLWAHSAANWVFGNAMCKLFTGLY 120
QY 121 HGVEGGGFFIILLIDRYLAIVHAVFALKARTVTFGVVTSVITWLVAVFASVPGIIFTK 180
Db 121 HGVEGGGFFIILLIDRYLAIVHAVFALKARTVTFGVVTSVITWLVAVFASVPGIIFTK 180
QY 181 COKEDSVVCGPFFRGWNNFTIMRNILGLVLPILIMVICYSGILKTLRCRNEKKRHR 240
Db 181 COKEDSVVCGPFFRGWNNFTIMRNILGLVLPILIMVICYSGILKTLRCRNEKKRHR 240

QY 241 AVRVIPTIMIVYFLWTPYNIIVILLNTFQEFGLSNCESTSQLDOATQVTEITLGMTHCCI 300
Db 241 AVRVIPTIMIVYFLWTPYNIIVILLNTFQEFGLSNCESTSQLDOATQVTEITLGMTHCCI 300
QY 301 NPIIYAVGKFRSLFHLALGCRITAPLQKPGVGGPGVPGKGNVKTTOGLLDGRGKGSKI 327
Db 301 NPIIYAVGKFRSLFHLALGCRITAPLQKPGVGGPGVPGKGNVKTTOGLLDGRGKGSKI 334
RESULT 3
A43113
Chemokine (C-C) receptor 5 - human
N:Alternate names: C-C CRK-5; CCR5
C:Species: Homo sapiens (man)
C:Date: 12-Jul-1996 #sequence_revision 12-Jul-1996 #text_change 20-Jun-2000
A:Accession: A43113; S71808; A58834; A58832; G02653; A58833
R:Samson, M.; Labbe, O.; Mollereau, C.; Vassart, G.; Parmentier, M.
Biochemistry 35, 3362-3367, 1996
A:Title: Molecular cloning and functional expression of a new human CC-chemokine rec
A:Reference number: A43113; MUID:96241590; PMID:8639485
A:Accession: A43113
A:Molecule type: mRNA
A:Residues: 1-352 <SAM1>
A:Cross-references: GB:X91492; NID:gl262810; PIDN:CAA62796.1; PID:gl262811
R:Samson, M.; Libert, F.; Doranz, B.J.; Rucker, J.; Liesnard, C.; Farber, C.M.; Sarac
M.; Imai, T.; Rana, S.; Yi, Y.; Smyth, R.J.; Collman, R.G.; Doms, R.W.; Vassart, G.;
Nature 382, 722-725, 1996
A:Title: Resistance to HIV-1 infection in caucasian individuals bearing mutant allele
A:Reference number: S71808; MUID:96345670; PMID:8751444
A:Accession: S71808
A:Status: nucleic acid sequence not shown; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 182-206; 207-230 <SAM2>
A:Accession: A58834
A:Status: nucleic acid sequence not shown; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-184, 'IKDHLGAGPAAACHGHLGNPKNSASVSK' <SAM3>
A:Cross-references: GB:X99393; NID:gl524062; PIDN:CAA67767.1; PID:gl524063
A:Note: This frameshift mutation results in a non-functional receptor but confers a
nd may have had a selective advantage by conferring resistance to Yersinia plague inf
R:Combadiere, C.; Ahuja, S.K.; Tiffany, H.L.; Murphy, P.M.
J. Leukoc. Biol. 60, 147-152, 1996
A:Title: Cloning and functional expression of CC CRK5, a human monocyte CC chemokine
A:Reference number: A58832; MUID:96295970; PMID:8699119
A:Accession: A58832
A:Molecule type: mRNA
A:Residues: 1-352 <COM1>
A:Cross-references: GB:U57840; NID:gl502408; PIDN:AAB17071.1; PID:gl502409
A:Experimental source: clone 8, endotoxin-stimulated peripheral blood monocytes
R:Combadiere, C.
submitted to the EMBL Data Library, May 1996
A:Reference number: H01541
A:Accession: G02653
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-89, 'L', 91-352 <COM2>
A:Cross-references: EMBL:U57840
R:Raport, C.J.; Gosling, J.; Schweickart, V.L.; Gray, P.W.; Charo, I.F.
J. Biol. Chem. 271, 17161-17166, 1996
A:Title: Molecular cloning and functional characterization of a novel human CC chemok
A:Reference number: A58833; MUID:96291862; PMID:8663314
A:Accession: A58833
A:Molecule type: mRNA
A:Residues: 1-352 <RAP>
A:Cross-references: GB:U54994; NID:gl457945; PIDN:AAC50598.1; PID:gl457946
C:Comment: This is a receptor for chemokines MIP-1alpha (see PIR:A30574), MIP-1beta (a
C:Comment: Macrophage- and dual-tropic strains of HIV-1 bind to a complex of chemokin
C:Genetics:
A:Gene: GDB:CMKBR5; CCR5; CCR-5; CC-CR-5; CCR5; ChemR13
A:Cross-references: GDB:I230510; OMIM:601373
C:Function:
A:Description: G protein-coupled receptor for chemokines MIP-1alpha, MIP-1beta and RA

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RESULT 5
MIP-1 alpha receptor like-2 - mouse
I49341
C:Species: Mus musculus (house mouse)
C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1998
C:Accession: I49341
R:Gao, J.L.; Murphy, P.M.
J. Biol. Chem. 270, 17494-17501, 1995
A:Title: Cloning and differential tissue-specific expression of three mouse beta ch
A:Reference number: I49339; MUID:95340546; PMID:7542241
A:Accession: I49341
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-359 <RES>
A:Cross-references: EMBL:U28406; NID:g881551; PID:g881552
C:Superfamily: vertebrate rhodopsin

Query Match      48.7%; Score 960; DB 2; Length 359;
Best Local Similarity 50.1%; Pred No. 1.4e-77;
Matches 187; Conservative 59; Mismatches 89; Indels 38; Gaps 7;

QY    10  IRNTNESGEVTTFFDYDGAPCHKEDVKQIGALLPPLYSLVFIFGVGNMLVLILTN 69
       | : ||| :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||
Db     8  IKTWESFE--TTPYEWNAPPCEKVRKEGLSGWLLPPLYSLVFIIGLLGNMMVLLIK 65

QY    70  CKLKLCITDIYLLNLAISDLFLITPLWAHSA--NEWTFGNAMCKLTGLTHYGFGGI 128
       | :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :|
Db    66  YRKLOIMNTIYLENLAISDLLFTVPFWIHYYLVLMNEWGFGHYMKMLSGFYLYADYS 125

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QY 129 FFILLITIDRYLAIVHAFALKARTVTFGVVTSVITWLVAVFASVPGIIFTKCKEDSVY 188
 Db 126 FFILLITIDRYLAIVHAFALRARTVTFATISITWGLAGLAALPEFIPHESQDSFGE 185
 QY 189 VCGPYEPFG---WNPFHTIMRNILGLVPLLLIMVICYSGLIKTLRCRNEKKRHRVAVR 244
 Db 186 SCSPPYEGEEDSWKRFHARLMMIFGLALPPLVWVICYSGLIKTLRCRNEKKRHRVAVR 244
 QY 245 IFTIMIVYFLWTPYINIVILLNTFQEFFGLSNCESTSQLDOATQVETLGMTHCCINPII 304
 Db 245 IFWVMIVFTFWTPYINIVILLNTFQEFFGLSNCESTSQLDOATQVETLGMTHCCINPII 304
 QY 305 YAFVGEKFRS---LFHIALGCRAPLQKPVCGPGVGRKNNKVVTTQGL---LDGRGK 357
 Db 305 YAFVGERFRKRLFFH-----RNVQFTWENIFQFLPGEENG 341
 QY 358 KSGIRAPASLOD 370
 Db 342 RTSSVSPSTGEQE 354

RESULT 6

I49339

macrophage inflammatory protein-1 alpha receptor - mouse

C:Species: Mus musculus (house mouse)
 C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 13-Aug-1999
 C:Accession: I49339

R:Gao, J.L.; Murphy, P.M.
 J. Biol. Chem. 270, 17494-17501, 1995
 A:Title: Cloning and differential tissue-specific expression of three mouse beta chemokines
 A:Reference number: I49339; MUID:95340546; PMID:7542241

A:Accession: I49339

A>Status: Preliminary; translated from GB/EMBL/DBDJ

A:Molecule type: DNA

A:Residues: 1-355 <RES>

A:Cross-references: EMBL:U28404; NID:g881547; PIDN:AAA89153.1; PID:g881548

C:Superfamily: vertebrate rhodopsin

Query Match 45.8%; Score 902.5; DB 2; Length 355;
 Best Local Similarity 53.1%; Pred. No. 1.7e-72;
 Matches 170; Conservative 58; Mismatches 75; Indels 17; Gaps 6;

QY 21 TTFDYDYGAPCHKDFVQIGAQLLPPLYSLVFIFGVGNMVLVILINCKKLCITDIY 80
 Db 13 TTFDYDGTPOCKTAVRAGAGLLPPLYSLVFIFGVGNMVLVILINCKKLCITDIY 72
 QY 81 LNLAISSDLLFLITPLWA-HSAANEWFGNAMCKLFTGLYHIGYFGGIFFIILLTIDRY 139
 Db 73 LNLAVSLLVFLTLPFWIDYKLDKDWIFGDAMCKLLSGFYLLGYSEIFFIILLTIDRY 132
 QY 140 LAIVHAFALKARTVTFGVVTSVITWLVAVFASVPGIIFTKCKEDSVYVCGPYFP--- 195
 Db 133 LAIVHAFALRARTVTLGITSITWALAILASMPALYFFKAQWETFRCSPPHYKSL 192
 QY 196 GWNPFHTIMRNILGLVPLLLIMVICYSGLIKTLRCRNEKKRHRVAVRIFTIMIVYFLF 255
 Db 193 KQMKRFQALKNLGLLPLLVIMVICYAGIIRLLR-RESEKVKAVRLIFATLLEFLL 251
 QY 256 WTPYINIVILLNTFQEFFGLSNCESTSQLDOATQVETLGMTHCCINPIIYAFVGEKFR--- 312
 Db 252 WTPYINLSVFSAFQDVFLETFNQCEQSKHLDLWAMQVTEVIATHTCCVNPPIIYVFGVERFWKY 311
 QY 313 -RSLF--HIALGCRAPLQK 329
 Db 312 LRQFQHVAVI-----PLAK 326

RESULT 7

G02436

chemokine (C-C) receptor 3 - human

N:Alternate names: C-C CR-3

C:Species: Homo sapiens (man)

C>Date: 21-Dec-1996 #sequence_revision 06-Jun-1997 #text_change 04-Mar-2000

C:Accession: G02436; A57237
 R:Ponath, P.D.
 submitted to the EMBL Data Library, February 1996

A:Reference number: H01272

A:Accession: G02436

A>Status: translated from GB/EMBL/DBDJ

A:Molecule type: DNA

A:Residues: 1-355 <PON>

A:Cross-references: EMBL:U49727; NID:g1477560; PIDN:AAB09726.1; PID:g1477561
 R:Combiadere, C.; Ahuja, S.K.; Murphy, P.M.
 J. Biol. Chem. 270, 16491-16494, 1995

A:Title: Cloning and functional expression of a human eosinophil CC chemokine receptor
 A:Reference number: A57237; MUID:95348056; PMID:7622448

A:Accession: A57237

A>Status: nucleic acid sequence not shown

A:Molecule type: mRNA

A:Residues: 1-106, 'N', 108-275, 'S', 277-280, 'R', 282-355 <COM>

A:Cross-references: GB:U28694; NID:g1199579; PIDN:AAC50469.1; PID:g1199580

A>Note: the translated sequence in GenBank entry HSU28694, release 113.0, PIDN:AAC504

C:Genetics:

A:Gene: GDB:CMKBR3

A:Cross-references: GDB:579624; OMIM:601268

A:Map position: 3p21-3p21

C:Superfamily: vertebrate rhodopsin

C:Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane F; 36-60/Domain: transmembrane #status predicted <TM1>

F; 71-91/Domain: transmembrane #status predicted <TM2>

F; 108-129/Domain: transmembrane #status predicted <TM3>

F; 147-171/Domain: transmembrane #status predicted <TM4>

F; 205-223/Domain: transmembrane #status predicted <TM5>

F; 240-261/Domain: transmembrane #status predicted <TM6>

F; 288-305/Domain: transmembrane #status predicted <TM7>

F; 24-273, 106-183/Disulfide bonds: #status predicted

F; 345/Binding site: phosphate (Ser) (covalent) (by casein kinase II) #status predicted

Query Match 45.2%; Score 890.5; DB 2; Length 355;

Best Local Similarity 54.6%; Pred. No. 2e-71;

Matches 167; Conservative 56; Mismatches 72; Indels 11; Gaps 5;

QY 21 TTFDYDYGAPCHKDFVQIGAQLLPPLYSLVFIFGVGNMVLVILINCKKLCITDIY 80

Db 14 TSYVD-DVGLLCEKADTRALMAQFVPLYSLVFVGLLGNVVMILIKYRRIRMTNIY 72

QY 81 LNLAISSDLLFLITPLWAHSA-ANEWFGNAMCKLFTGLYHIGYFGGIFFIILLTIDRY 139

Db 73 LNLAISSDLLFLITPLFWIHYVRGHNWVFGHGMCKLLSGFYHTGLYSEIFFIILLTIDRY 132

QY 140 LAIVHAFALKARTVTFGVVTSVITWLVAVFASVPGIIFTKCKEDSVYVCGPYFP--- 196

Db 133 LAIVHAFALRARTVTFGVITSITWGLAVLALPEFIFETEELFEETLCSALYPEDTV 192

QY 197 -GWNPFHTIMRNILGLVPLLLIMVICYSGLIKTLRCRNEKKRHRVAVRIFTIMIVYFLF 255

Db 193 YSRHFHTLRMTIFCLVPLLVMAICYTGIIKTLRCPS-KKKYKAIRLIFVIMAVFFIF 251

QY 256 WTPYINIVILLNTFQEFFGLSNCESTSQLDOATQVETLGMTHCCINPIIYAFVGEKFRS- 314

Db 252 WTPYINALLSSYSQISILFGNDCERTKHLDLVLMVLTVEIVAYSHCCMNPVIYAFVGERFKY 311

QY 315 ---LFH 317

Db 312 LRHEFH 317

RESULT 8

JC4587

chemokine (C-C) receptor 4 - mouse

C:Species: Mus musculus (house mouse)

C>Date: 08-Mar-1996 #sequence_revision 19-Apr-1996 #text_change 20-Jun-2000

C:Accession: JC4587

R:Hoogewerf, A.J.; Black, D.; Proudfoot, A.E.I.; Wells, T.N.C.; Power, C.A.

Biochem. Biophys. Res. Commun. 218, 337-343, 1996

A:Title: Molecular cloning of murine CC CR-4 and high affinity binding of chemokines

A:Reference number: JC4587; MUID:96136324; PMID:8573157
 A:Accession: JC4587
 A:Molecule type: mRNA
 A:Residues: 1-360 <HOO>
 A:Cross-references: EMBL:X90862; NID:g1167851; PIDN:CAA62372.1; PID:g1167852
 A:Experimental source: thymus
 C:Genetics:
 A:Gene: cc ckr-4
 C:Superfamily: vertebrate rhodopsin
 C:Keywords: glycoprotein; phosphoprotein; receptor; thymus
 F:2,183/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F:72,202,350/Binding site: phosphate (Ser) (covalent) (by protein kinase II) #status predicted
 F:145/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #status predicted
 F:321/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted

Query Match 42.3%; Score 833; DB 2; Length 360;
 Best Local Similarity 47.9%; Pred. No. 2.6e-66;
 Matches 160; Conservative 63; Mismatches 89; Indels 22; Gaps 5;

QY 10 IRTNTNEGEVTTFFDYD-YGAPCHKFDVKQIGQAQLLPPLYSLVIFGFGVGNMVLVILI 68
 DB 6 VTDITQDETIVNSYFYFESMPKPCKEGKAFGEVLPPLYSLVIFLGLFGNSVVLVLF 65

QY 69 NCKKLKCLTDIYLLALSDILFLTLPLWAHSAANEVFGNAMCKLFTGLYHIGYFGGI 128
 DB 66 KYKRLKMTDYLNLALSDLLFLVLSLPWGYAADQWVGLGCKIYVSWMYLVGFYSGI 125

QY 129 FFIILLTDRLYLAIVHAFKARVTVGVTSVITWLVAVPASVPGIIFTKCKEDSVY 188
 DB 126 FFIIMLSIDRLYLAIVHAFSLKARTLYGVITSLTWSVAVPASLPGLLFSCYTEHNHT 185

QY 189 VCGPYF---PRGNFNHTMRNLGLVPLLMVICYSGILKTLRCRNEKKRHRVRYI 245
 DB 186 YCKTQYSVNSTTKWVLSLEINVLGLIPLGLIMLFWYSMIITLQCKNEKK-NRAVRMI 244

QY 246 FTIMIVYFLWTPYNYVILLNTQFEEFGLSNCESTSQLDAQVTVTGLMTHCCINPIIY 305
 DB 245 FGWVVLGLFGWTPYNYVFLFLEVLQDCTLERYLDYAIAQATETLGLFIHCCLNPIY 304

QY 306 AFVGEKFR----SLPHIALGCRAPLOKPVCGP 335
 DB 305 FFLGKFKRYITQLFR-----TCRGP 325

RESULT 9
 A57160
 chemokine (C-C) receptor 4 - human
 N:Alternate names: C-C CKR-4
 P:Species: Homo sapiens (man)
 C:Date: 10-Nov-1995 #sequence_revision 10-Nov-1995 #text_change 21-Jul-2000
 C:Accession: A57160
 R:Power, C.A.; Meyer, A.; Nemeth, K.; Bacon, K.B.; Hoogwerf, A.J.; Proudfoot, A.E.I.; W
 J. Biol. Chem. 270, 19495-19500, 1995
 A:Title: Molecular cloning and functional expression of a novel CC chemokine receptor cl
 A:Reference number: A57160; MUID:95370289; PMID:7642634
 A:Accession: A57160
 A:Status: preliminary; not compared with conceptual translation
 A:Molecule type: mRNA
 A:Residues: 1-360 <POW>
 A:Cross-references: GB:X85740; NID:g1370103; PIDN:CAA59743.1; PID:g971452
 A:Note: source clone K5-5
 C:Genetics:
 A:Gene: GDB:CMKBR4
 A:Cross-references: GDB:677463
 A:Map position: 3p21-3p21
 C:Superfamily: vertebrate rhodopsin
 C:Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane prot
 F:40-65/Domain: transmembrane #status predicted <TM1>
 F:76-97/Domain: transmembrane #status predicted <TM2>
 F:112-133/Domain: transmembrane #status predicted <TM3>
 F:151-175/Domain: transmembrane #status predicted <TM4>
 F:208-226/Domain: transmembrane #status predicted <TM5>
 F:243-264/Domain: transmembrane #status predicted <TM6>

F:291-308/Domain: transmembrane #status predicted <TM7>
 F:29-276,110-187/disulfide bonds: #status predicted
 F:72,350/Binding site: phosphate (Ser) (covalent) (by casein kinase II) #status predicted
 F:145/Binding site: phosphate (Ser) (covalent) (by protein kinase C) #status predicted
 F:183,194/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F:321/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted

Query Match 42.2%; Score 831.5; DB 2; Length 360;
 Best Local Similarity 51.9%; Pred. No. 3.5e-66;
 Matches 154; Conservative 58; Mismatches 80; Indels 5; Gaps 3;

QY 31 PCKHFDVKQIGQAQLLPPLYSLVIFGFGVGNMVLVILIINCKKLKCTDIYLLMALSDLL 90
 DB 28 PCKREGIKAFGELEPPLYSLVIFGFGVGNMVLVILFKYKRLSRMTDVLNLALSDLL 87

QY 91 FLITPLWAHSAANEVFGNAMCKLFTGLYHIGYFGGIIFILLTDRYLAIHAFK 150
 DB 88 FVFLPFWGYAADQWVGLGCKIMISWMLVGFYSGIFVFMLSIDRLYLAIVHAFSLR 147

QY 151 ARTVTFGVTSVITWLVAVPASVPGIIFTKCKEDSVYVCGPYFPRG---WNNFHTMRN 207
 DB 148 ARTLYGVITSLTWSVAVPASLPGFLFSTCYTERNHTYCKTYSLSNTTKWVLSLEIN 207

QY 208 ILGLVPLLMVICYSGILKTLRCRNEKKRHRVAVTITMIVYFLWTPYNYVILLNT 267
 DB 208 ILGLVPLLMVICYSGILKTLRCRNEKK-NKAVKMFVAVVFLGFWTPYNYVILLFLET 266

QY 268 FQEEFGLSNCESTSQLDAQVTVTGLMTHCCINPIYAFVGEKFRS-LPHIALGCR 323
 DB 267 LVELEVLQDCTFERYLDYAIAQATETLAFVHCCCLNPPIYFELGKFRKYLQLFKTCR 323

RESULT 10
 RS5594
 G protein-coupled receptor E1 - equine herpesvirus 2
 C:Species: equine herpesvirus 2
 C:Date: 10-Apr-1996 #sequence_revision 19-Apr-1996 #text_change 13-Aug-1999
 C:Accession: RS5594
 R:Telford, E.A.R.; Watson, M.S.; Aird, H.C.; Perry, J.; Davison, A.J.
 J. Mol. Biol. 249, 520-528, 1995
 A:Title: The DNA sequence of equine herpesvirus 2.
 A:Reference number: RS5594; MUID:95302501; PMID:7783207
 A:Accession: RS5594
 A:Status: preliminary; nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-383 <TEL>
 A:Cross-references: GB:U02824; NID:g695172; PIDN:AAC13788.1; PID:g695173
 C:Superfamily: vertebrate rhodopsin
 C:Keywords: G protein-coupled receptor

Query Match 40.3%; Score 794.5; DB 2; Length 383;
 Best Local Similarity 44.3%; Pred. No. 7.2e-63;
 Matches 164; Conservative 60; Mismatches 107; Indels 39; Gaps 7;

QY 4 TSSRFRTRNTNEGEVTTFFDYD--GAPCHKFDVKQIGQAQLLPPLYSLVIFGFGVGNM 61
 DB 32 TTIASLVPTSNSSDDYDDLDVDYBESAPCYKSDTFLAAQVVPALYLVFLFGLGNI 91

QY 62 LVLVILLNCKLCLTDIYLLNLALSDLLFLITLPLWAH--SAANEVFGNAMCKLFTGL 119
 DB 92 LVITIVRYWKIRKLNMLNLNLALSDLLFLITLPLFWHHYIGMTHDFTGLSCKLLRGV 151

QY 120 YHIGYFGGIIFILLTIDRYLAIVHAFKARVTVGVTSVITWLVAVPASVPGIIFT 179
 DB 152 CYNLSYQVFCIILLTVDRLVAVVAVTALRFRVTGIVTCVCTWFLAGLSLPERFFH 211

QY 180 KCKEDSVYVCGPYF---RGWNNFHTMRNLGLVPLLMVICYSGILKTLRCRNE 235
 DB 212 GHODDNGRVQCDPYYPPEMSTNVWRRHAKVIMLSLILPLIMAVCYVIITRLLR-RPS 270

QY 236 KKRHRVAVTITMIVYFLWTPYNYVILLNTQFEEFGLSNCESTSQLDAQVTVTGLM 295
 DB 271 KKKYKAILRILFVIMVAVFVWTPYNYVILLNSTFHTATLLNLOCAUSNLMALLTKTVAY 330

G protein-coupled receptor CRK-L1 - human
 N:Alternate names: chemokine receptor-like protein TER1; GPR-CY6
 C:Species: Homo sapiens (man)
 C:Date: 31-Jan-1997 #sequence_revision 31-Jan-1997 #text_change 21-Jul-2000
 C:Accession: J05067; G02776; G02387
 R:Zaballos, A.; Varona, R.; Gutierrez, J.; Lind, P.; Marquez, G.
 B:Biochem. Biophys. Res. Commun. 227, 846-853, 1996
 A:Title: Molecular cloning and RNA expression of two new human chemokine re
 A:Reference number: J05067; MUID:97040707; PMID:8886020
 A:Accession: J05067
 A: Molecule type: DNA
 A:Residues: 1-355 <ZAB>
 A:Cross-references: EMBL:Z79782; NID:g1668735; PID:CAB02142.1; PID:g166873
 R:Napolitano, M.; Zingoni, A.; Bernardini, G.; Spinetti, G.; Rocchi, M.; Sa
 submitted to the EMBL Data Library, June 1996
 A:Reference number: H01714
 A:Accession: G02776
 A:Status: translated from GB/EMBL/DBDJ
 A: Molecule type: DNA

Probable G protein-coupled receptor - rat
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 21-Jul-2000
 C:Accession: F51818
 R:Harrison, J.K.; Barber, C.M.; Lynch, K.R.
 Neurosci. Lett. 169, 85-89, 1994
 A:Title: cDNA cloning of a G-protein-coupled receptor expressed in rat spinal
 A:Reference number: F51818; MUID:94323113; PMID:8047298
 A:Accession: F51818
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-354 <RES>
 A:Cross-references: EMBL:U04808; NID:q2558635; PIDN:AA887093.1; PID:q439861
 C:Superfamily: vertebrate rhodopsin
 C:Keywords: G protein-coupled receptor
 Query Match 35.8% Score 704.5 DB 2: Length 354:

Best Local Similarity 47.6%; Pred. No. 6.6e-55;
Matches 151; Conservative 43; Mismatches 112; Indels 11; Gaps 6;

QY 24 FDYDGA-PCHFDKQVGAQALLPPLYSLVFIFGFGVGNMLVLLINCKKLCCLTDIYLL 82
DB 13 FEYDDSAEACYLGDIVAFGTIFLSIFSVFTFGLVGNLLVWALTNSRKSISITDIYLL 72

QY 83 NLAISDLLFLITLPLWAHSAANEWFGNAMCKLFTGLYHGYGGFFIITLLIDRYLAI 142
DB 73 NLAISDLLFVATLPFWTHYLISHEGLHNAAMCKLTAFYFGFGGFFITVVISIDRYLAI 132

QY 143 VHAFALKARTVFTGVVTVITWLVAVFASVPGIIFTKQKEDSVVCGPYFPRGNHNF 202
DB 133 VLAANSNNRTVQGVTSISLGVWAAAILVASPQFMFTK-RKDN-CLGDYDEVLQEIW 188

QY 203 TMR-----NILGLVPLLLIMVICYSGILKTLRCRNEKKRHRAVRVFTIMIVYFLEWTP 258
DB 189 PVLNRSEVNLGVPLLLIMSFYCFYRIVRTFLFSCKNRKKA-RAIRLILLVVVVFELEWTP 247

QY 259 YNIVILLNTFOEFGLSNCESTSQLDQATQVETGLMTHCCINPIIYAFVGEKERS-LFH 317
DB 248 YNIVIFLETILKFNFFPSCGMKRDRLWALSVTETVAFSHCCCLNPFYAFAGEKFRVLRH 307

QY 318 IALGCRAPLOKPVCG 334
DB 308 LYNKCLAVLCGRPVHAG 324

RESULT 14
JC4304
orphan G protein-coupled receptor - human
N:Alternate names: V28 protein
C:Species: Homo sapiens (man)
C:Date: 16-Nov-1995 #sequence_revision 08-Feb-1996 #text_change 19-May-2000
C:Accession: JC4304

R:Report, C.J.; Schweickart, V.L.; Eddy Jr., R.L.; Shows, T.B.; Gray, P.W.
Gene 163, 295-299, 1995
A:Title: The orphan G-protein-coupled receptor-encoding gene V28 is closely related to g
A:Reference number: JC4304; MUID:96011651; PMID:7590284
A:Accession: JC4304
A:Molecule type: mRNA
A:Residues: 1-355 <NAP>
A:Cross-references: GB:U20350; NID:G665580; PIDN:AAA91783.1; PID:G665581
A:Experimental source: peripheral blood mononuclear cell
C:Comment: This protein is a cell-surface receptor which recognizes extracellular signal
C:Genetics:
A:Gene: v28

A:Map position: 3pter-p21
C:Superfamily: vertebrate rhodopsin
C:Keywords: G protein-coupled receptor; lymphokine; transmembrane protein
F:35-57/Domain: transmembrane #status predicted <TM1>
F:56-88/Domain: transmembrane #status predicted <TM2>
F:104-125/Domain: transmembrane #status predicted <TM3>
F:146-165/Domain: transmembrane #status predicted <TM4>
F:197-217/Domain: transmembrane #status predicted <TM5>
F:230-254/Domain: transmembrane #status predicted <TM6>
F:275-296/Domain: transmembrane #status predicted <TM7>

Query Match 35.4%; Score 698; DB 2; Length 355;
Best Local Similarity 45.3%; Pred. No. 2.5e-54;
Matches 146; Conservative 49; Mismatches 111; Indels 16; Gaps 7;

QY 18 EYVTFDY-DYGAPCHKFDVKQIGAOALLPPLYSLVFIFGFGVGNMLVLLINCKKLCCL 76
DB 6 ESVTFENPEYDLAECYIGDIVFGTVFLFSIFYSFVGLVGNLLVWALTNSKPKSV 65

QY 77 TDYLLNLAISSDLLFLITLPLWAHSAANEWFGNAMCKLFTGLYHGYGGFFIITLLI 136
DB 66 TDYLLNLAISSDLLFLVATLPFWTHYLINELGLHNAAMCKFTAFYFGFGGFFITVISI 125

QY 137 DRYLAIVHAFALKARTVFTGVVTVITWLVAVFASVPGIIFTKQKEDSVVCGPYFPR 196
DB 133 VLAANSNNRTVQGVTSISLGVWAAAILVASPQFMFTK-RKDN-CLGDYDEVLQEIW 188

DB 126 DRYLAIVLAANSNNRTVQGVTSISLGVWAAAILVASPQFMFTK-QKENE-CLGDYPE 181
QY 197 GWNEFTIMRNI---LGLVPLLLIMVICYSGILKTLRCRNEKKRHRAVRVFTIMIVY 252
DB 182 VLOEIPVLRNVTNFGFLPLLLIMSYCYFRIQTFLFSCKNHKKA-KAKLILLVIVF 240
QY 253 FLEWTPYINIVILLNTFOEFGLSNCESTSQLDQATQVETGLMTHCCINPIIYAFVGEK 312
DB 241 FLEWTPYINIVILETLKLYDFPSCDMRKDLRLALSVTETVAFSHCCCLNPLIYAFAGEK 300

QY 313 RS-LFHIALGCRAPLOKPVCG 333
DB 301 RRYLYHLHYGKCLAV-----LCG 317

RESULT 15
JC5942
chemokine receptor - human
C:Species: Homo sapiens (man)
C:Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000
C:Accession: JC5942

R:Pan, P.; Kwaw, H.; Su, K.; Zeng, Z.; Augustus, M.; Carter, K.C.; Li, Y.
Biochem. Biophys. Res. Commun. 243, 264-268, 1998
A:Title: Cloning and characterization of a novel human chemokine receptor.
A:Reference number: JC5942; MUID:98139902; PMID:9473515
A:Accession: JC5942
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-344 <FAN>
A:Cross-references: GB:U97123; NID:G2897070; PIDN:AAC39595.1; PID:G2897071
C:Superfamily: vertebrate rhodopsin

Query Match 32.7%; Score 644.5; DB 2; Length 344;
Best Local Similarity 39.9%; Pred. No. 1.4e-49;
Matches 132; Conservative 58; Mismatches 120; Indels 21; Gaps 6;

QY 27 DYGAPECHKEDVKQIGAOALLPPLYSLVFIFGFGVGNMLVLLINCKKLCCLTDIYLLAI 86
DB 23 DEAEQCDKYDAQALSAQLVPSLCSAVFVIGVLDNLLVLLVILYKGLKRVENIYLLNLAV 82

QY 87 SLLFLITLPLWAHSAANEWFGNAMCKLFTGLYHGYGGFFIITLLIDRYLAIVH-A 145
DB 83 SNLCFLTLPLWAHAG-----GDMCKILIGLVFVGLYSETFNCLLTVORYLVFLHKG 136

QY 146 VFALKARTVFTGVVTVITWLVAVFASVPGIIFTKQKEDSVVCG-----PYFPRG---W 198
DB 137 NFPSARRVPCGIITSLVWATLAILATLPEYVYKPKQMEDQYKCAFSTFPLPADETFW 196

QY 199 NNFTIMRNLGLVPLLLIMVICYSGILKTLRCRNEKKRHRAVRVFTIMIVYFLEWTP 258
DB 197 KHFLTKMNLVPLVPLFIFFLVQVRKTL---RFQRYSLFKLVFALIMVFLMWP 253

QY 259 YNIVILLNTFOEFGLSNCESTSQLDQATQVETGLMTHCCINPIIYAFVGEKERS---- 314
DB 254 YNIAFFLSTFKHEFSLSDCKSYNLDSVHTKLITATTHCCINPLIYAFLOGTFSKYLOR 313

QY 315 LFHIALGCRAPLOKPVCGPGVPRGNKV 345
DB 314 CFHLRSNTPLQPRGSAQGTREERPDHSTEV 344

Search completed: May 19, 2003, 16:49:15
Job time : 30.0436 secs

